

State Water Resources Control Board

Division of Drinking Water

February 24, 2016
System No.: 1510019

Mr. Michael James, Public Works Director
City of Shafter
336 Pacific Avenue
Shafter, CA 93263

**RE: Citation No. 03_12_16C_004
Total Coliform Maximum Contaminant Level Violation
For December 2015**

Dear Mr. James:

Enclosed is a Citation issued to the City of Shafter (hereinafter "Water System") public water system for noncompliance with the total coliform maximum contaminant level (MCL).

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at \$153.00) for the time spent on issuance of this citation. The California Health and Safety Code Section 116577 provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation.

The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on Water System for the current fiscal year.

If you have any questions regarding this matter, please contact Mr. Eli McFarland of my staff or me at (559) 447-3300.

Sincerely,



Tricia A. Wathen, P.E.
Senior Sanitary Engineer, Visalia District
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

TAW/LR
Enclosures
Certified Mail No. 7015 1660 0000 0781 8121
cc: Kern County Environmental Health Department

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

Name of Public Water System: City of Shafter

Water System No: 1510019

Attention: Mr. Michael James, Public Works Director
336 Pacific Avenue
Shafter, CA 93263

Issued: February 24, 2016

CITATION FOR NONCOMPLIANCE
TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION
CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64426.1
DECEMBER 2015

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Board") to issue a citation to a public water system when the State Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

1 The State Board, acting by and through its Division of Drinking Water (hereinafter "Division")
2 and the Deputy Director for the Division, hereby issues this citation pursuant to Section 116650
3 of the CHSC to the City of Shafter (hereinafter "Water System") for violation of CHSC, Section
4 116555(a)(1) and California Code of Regulations (hereinafter "CCR"), Title 22, Section
5 64426.1.

6
7 A copy of the applicable statutes and regulations are included in Appendix 1, which is attached
8 hereto and incorporated by reference.

9 10 **STATEMENT OF FACTS**

11 The Water System is classified as a community water system with a population of
12 approximately 16,928 persons served through 4,566 service connections. The Water System
13 is required to collect a minimum of four (4) distribution system bacteriological samples per
14 week. The Division received laboratory results for 115 bacteriological samples collected during
15 December 2015 from the Water System. All samples were analyzed for the presence of total
16 coliform bacteria. Thirty-seven (37) of the 115 samples analyzed were positive for total
17 coliform bacteria. None of the total coliform positive samples showed the presence of fecal
18 coliform or *Escherichia coli* (*E. coli*) bacteria. All water samples for coliform bacteria are
19 summarized in Appendix 2.

20 21 **DETERMINATION**

22 CCR, Title 22, Section 64426.1, Total Coliform Maximum Contaminant Level (MCL) states that
23 a public water system is in violation of the total coliform MCL if it collects at least 40
24 bacteriological samples per month and more than five (5) percent of the samples collected
25 during any month are total coliform-positive.

1 The Water System took 115 bacteriological samples during December 2015. The results of the
2 analysis of thirty-seven (37) samples were total coliform positive. This represents thirty-two (32)
3 percent of the total number of samples taken in this monitoring period. Therefore, the Division
4 has determined that the Water System violated Title 22, CCR, Section 64426.1 during
5 December 2015.

6 **DIRECTIVES**

7 The City of Shafter has completed the necessary public notification and investigation and no
8 other directives are necessary at this time.
9

10 The State Board reserves the right to make such modifications to the Citation as it may deem
11 necessary to protect public health and safety. Such modifications may be issued as
12 amendments to this Citation and shall be effective upon issuance.
13

14 Nothing in this Citation relieves the Water System of its obligation to meet the requirements of
15 the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section
16 116270), or any regulation, standard, permit or order issued or adopted thereunder.
17

18 **PARTIES BOUND**

19 This Citation shall apply to and be binding upon the Water System, its owners, shareholders,
20 officers, directors, agents, employees, contractors, successors, and assignees.
21

22 **SEVERABILITY**

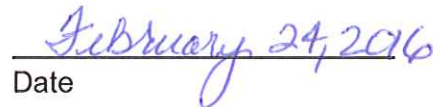
23 The directives of this Citation are severable, and the Water System shall comply with each and
24 every provision hereof, notwithstanding the effectiveness of any other provision.
25
26
27

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Board to: issue a citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Board. The State Board does not waive any further enforcement action by issuance of this Citation.



Tricia Wathen, P.E.
Senior Sanitary Engineer, Visalia District
DRINKING WATER FIELD OPERATIONS BRANCH


Date

TAW/LR

Appendices (6):

- Appendix 1: Applicable Statutes and Regulations
- Appendix 2: Summary of Distribution Bacteriological Samples
- Appendix 3: Summary of Source Bacteriological Samples
- Appendix 4: Public Notice for December 2015
- Appendix 5: Proof of Notification Form
- Appendix 6: Positive Total Coliform Investigation report

Certified Mail No. 7015 1660 0000 0781 8121



APPENDIX 1

Applicable Statutes and Regulations for Citation No. 03_12_16C_004

Violation of Total Coliform Rule

Section 116271 of the CHSC states in relevant part:

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

- (1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
- (2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
- (3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
- (4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
- (5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
- (6) Chapter 7 (commencing with Section 116975).
- (7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
- (8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
- (9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
- (10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
- (11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
- (12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

- (k)
- (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
 - (2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116555(a)(1) of the CHSC states in relevant part:

(a) Any person who owns a public water system shall ensure that the system does all of the following:

- (1) Complies with primary and secondary drinking water standards.

Section 116650 of the CHSC states in relevant part:

(a) If the department determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the department may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.

(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.

(c) A citation may specify a date for elimination or correction of the condition constituting the violation.

(d) A citation may include the assessment of a penalty as specified in subdivision (e).

(e) The department may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

Section 64421 (General Requirements)

- (a) Each water supplier shall:
- (1) Develop a routine sample siting plan as required in section 64422;
 - (2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
 - (3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in section 64423.1;
 - (4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in section 64426; and
 - (5) Comply with the Maximum Contaminant Level as required in section 64426.1.
- (b) Water suppliers shall perform additional bacteriological monitoring as follows:
- (1) After construction or repair of wells;
 - (2) After main installation or repair;
 - (3) After construction, repair, or maintenance of storage facilities; and
 - (4) After any system pressure loss to less than five psi. Samples collected shall represent the water quality in the affected portions of the system.

Section 64422 (Routine Sample Siting Plan) of CCR states in relevant part:

- (a) By September 1, 1992, each water supplier shall develop and submit to the State Board a siting plan for the routine collection of samples for total coliform analysis, subject to the following:
- (1) The sample sites chosen shall be representative of water throughout the distribution system including all pressure zones, and areas supplied by each water source and distribution reservoir.
 - (2) The water supplier may rotate sampling among the sample sites if the total number of sites needed to comply with (a)(1) above exceeds the number of samples required according to Table 64423-A. The rotation plan shall be described in the sample siting plan.
- (b) If personnel other than certified operators will be performing field tests and/or collecting samples, the sample siting plan shall include a declaration that such personnel have been trained, pursuant to §64415 (b).
- (c) The supplier shall submit an updated plan to the State Board at least once every ten years and at any time the plan no longer ensures representative monitoring of the system.

Section 64423 (Routine Sampling) of CCR states in relevant part:

- (a) Each water supplier shall collect routine bacteriological water samples as follows:
- (1) The minimum number of samples for community water systems shall be based on the known population served or the total number of service connections, whichever results in the greater number of samples, as shown in Table 64423-A. A community water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency. The minimum reduced frequency shall not be less than one sample per quarter.
 - (2) The minimum number of samples for nontransient-noncommunity water systems shall be based on the known population served as shown in Table 64423-A during those months when the system is operating. A nontransient-noncommunity water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency if it has not violated the requirements in this article during the past twelve months. The minimum reduced frequency shall not be less than one sample per quarter.
 - (3) The minimum number of samples for transient-noncommunity water systems using groundwater and serving 1000 or fewer persons a month shall be one in each calendar quarter during which the system provides water to the public.
 - (4) The minimum number of samples for transient-noncommunity water systems using groundwater and serving more than 1000 persons during any month shall be based on the known population served as shown in Table 64423-A, except that the water supplier may request from the State Board a reduction in monitoring for any month the system serves 1000 persons or fewer. The minimum reduced frequency shall not be less than one sample in each calendar quarter during which the system provides water to the public.
 - (5) The minimum number of samples for transient-noncommunity water systems using approved surface water shall be based on the population served as shown in Table 64423-A. A system using groundwater under the direct influence of surface water shall begin monitoring at this frequency by the end of the sixth month after the State Board has designated the source to be approved surface water.
 - (6) A public water system shall collect samples at regular time intervals throughout the month, except that a system using groundwater which serves 4,900 persons or fewer may collect all required samples on a single day if they are taken from different sites.
- (b) In addition to the minimum sampling requirements, all water suppliers using approved surface water which do not practice treatment in compliance with Sections 64650 through 64666, shall collect a minimum of one sample before or at the first service connection each day during which the turbidity level of the water delivered to the system exceeds 1 NTU. The sample shall be collected within 24 hours of the exceedance and shall be analyzed for total coliforms. If the water supplier is unable to collect and/or analyze the sample within the 24-hour time period because of extenuating circumstances beyond its control, the supplier shall notify the State Board within the 24-hour time period and may request an extension. Sample results shall be included in determining compliance with the MCL for total coliforms in Section 64426.1.

(c) If any routine, repeat, or replacement sample is total coliform-positive, then the water supplier shall collect repeat samples in accordance with Section 64424 and comply with the reporting requirements specified in Sections 64426 and 64426.1.

Table 64423-A
Minimum Number of Routine Total Coliform Samples

<i>Monthly Population Served</i>	<i>Service Connections</i>	<i>Minimum Number of Samples</i>
25 to 1000	15 to 400	1 per month
1,001 to 2,500	401 to 890	2 per month
2,501 to 3,300	891 to 1,180	3 per month
3,301 to 4,100	1,181 to 1,460	4 per month
4,101 to 4,900	1,461 to 1,750	5 per month
4,901 to 5,800	1,751 to 2,100	6 per month
5,801 to 6,700	2,101 to 2,400	7 per month
6,701 to 7,600	2,401 to 2,700	2 per week
7,601 to 12,900	2,701 to 4,600	3 per week
12,901 to 17,200	4,601 to 6,100	4 per week
17,201 to 21,500	6,101 to 7,700	5 per week
21,501 to 25,000	7,701 to 8,900	6 per week
25,001 to 33,000	8,901 to 11,800	8 per week
33,001 to 41,000	11,801 to 14,600	10 per week
41,001 to 50,000	14,601 to 17,900	12 per week
50,001 to 59,000	17,901 to 21,100	15 per week
59,001 to 70,000	21,101 to 25,000	18 per week
70,001 to 83,000	25,001 to 29,600	20 per week
83,001 to 96,000	29,601 to 34,300	23 per week
96,001 to 130,000	34,301 to 46,400	25 per week
130,001 to 220,000	46,401 to 78,600	30 per week
220,001 to 320,000	78,601 to 114,300	38 per week
320,001 to 450,000	114,301 to 160,700	50 per week
450,001 to 600,000	160,701 to 214,300	55 per week
600,001 to 780,000	214,301 to 278,600	60 per week
780,001 to 970,000	278,601 to 346,400	70 per week
970,001 to 1,230,000	346,401 to 439,300	75 per week
1,230,001 to 1,520,000	439,301 to 542,900	85 per week
1,520,001 to 1,850,000	542,901 to 660,700	90 per week
1,850,001 to 2,270,000	660,701 to 810,700	98 per week
2,270,001 to 3,020,000	810,701 to 1,078,600	105 per week
3,020,001 to 3,960,000	1,078,601 to 1,414,300	110 per week
3,960,001 or more	1,414,301 or more	120 per week

Section 64423.1 (Sample Analysis and Reporting of Results)

(a) The water supplier shall designate (label) each sample as routine, repeat, replacement, or "other" pursuant to Section 64421(b), and have each sample analyzed for total coliforms. The supplier also shall require the laboratory to analyze the same sample for fecal coliforms or *Escherichia coli* (*E. coli*) whenever the presence of total coliforms is indicated. As a minimum, the analytical results shall be reported in terms of the presence or absence of total or fecal coliforms, or *E. coli* in the sample, whichever is appropriate.

(b) The water supplier shall require the laboratory to notify the supplier within 24 hours, whenever the presence of total coliforms, fecal coliforms or *E. coli* is demonstrated in a sample or a sample is invalidated due to interference problems, pursuant to Section 64425(b), and shall ensure that a contact person is available to receive these analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any positive bacteriological results if the laboratory cannot make direct contact with the designated contact person within 24 hours.

(c) Analytical results of all required samples collected for a system in a calendar month shall be reported to the State Board not later than the tenth day of the following month, as follows:

(1) The water supplier shall submit a monthly summary of the bacteriological monitoring results to the State Board.

(2) For systems serving fewer than 10,000 service connections or 33,000 persons, the water supplier shall require the laboratory to submit copies of all required bacteriological monitoring results directly to the State Board.

(3) For systems serving more than 10,000 service connections, or 33,000 persons, the water supplier shall require the laboratory to submit copies of bacteriological monitoring results for all positive routine samples and all repeat samples directly to the State Board.

(d) Laboratory reports shall be retained by the water supplier for a period of at least five years and shall be made available to the State Board upon request.

Section 64424 (Repeat Sampling) of the CCR states in relevant part:

(a) If a routine sample is total coliform-positive, the water supplier shall collect a repeat sample set as described in paragraph (1) within 24 hours of being notified of the positive result. The repeat samples shall be all be collected within the same 24 hour time period. A single service connection system may request that the State Board allow the collection of the repeat sample set over a four-day period.

(1) For a water supplier that normally collects more than one routine sample a month, a repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.

(2) If the water supplier is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the water supplier shall notify the State Board within 24 hours. The State Board will then determine how much time the supplier will have to collect the repeat samples.

(b) When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and downstream unless there is no upstream and/or downstream service connection.

(c) If one or more samples in the repeat sample set is total coliform-positive, the water supplier shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The supplier shall repeat this process until either no coliform are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms specified in Section 64426.1 has been exceeded and notifies the State Board.

(d) If a public water system for which **fewer than five routine samples/month** are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

(1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.

(2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with Section 64426.1.

Section 64426 (Significant Rise in Bacterial Count) of the CCR states in relevant part:

(a) Any of the following criteria shall indicate a possible significant rise in bacterial count:

(1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;

(2) A system has a sample which is positive for fecal coliform or *E. coli*; or

(3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in Section 64426.1.

(b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:

(1) Contact the State Board by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours; and

(2) Submit to the State Board information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:

(A) Current operating procedures that are or could potentially be related to the increase in bacterial count;

(B) Any interruptions in the treatment process;

(C) System pressure loss to less than 5 psi;

(D) Vandalism and/or unauthorized access to facilities;

(E) Physical evidence indicating bacteriological contamination of facilities;

(F) Analytical results of any additional samples collected, including source samples;

(G) Community illness suspected of being waterborne; and

(H) Records of the investigation and any action taken.

Section 64426.1 (Total Coliform Maximum Contaminant Level (MCL)) of CCR states in relevant part:

(b) A public water system is in violation of the total coliform MCL when any of the following occurs:

(1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or

(2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or

(3) Any repeat sample is fecal coliform-positive or *E. coli*-positive; or

(4) Any repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample is total coliform-positive.

(c) If a public water system is not in compliance with paragraphs (b)(1) through (4), during any month in which it supplies water to the public, the water supplier shall notify the State Board by the end of the business day on which this is determined, unless the

determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours of the determination. The water supplier shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraph (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of paragraph (b)(3) or (4), pursuant to section 64463.1.

Section 64463.1 (Tier 1 Public Notice) of CCR states in relevant part:

(a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs:

(1) Violation of the total coliform MCL when:

(A) Fecal coliform or *E. coli* are present in the distribution system; or

(B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or *E. coli* in the repeat sample;...

(b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the State Board that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:

(1) Give public notice pursuant to this section;

(2) Initiate consultation with the State Board within the same timeframe; and

(3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.

(c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms:

(1) Radio or television;

(2) Posting in conspicuous locations throughout the area served by the water system;

(3) Hand delivery to persons served by the water system; or

(4) Other method approved by the State Board, based on the method's ability to inform water system users.

Section 64465 (Public Notice Content and Format) of the CCR states in relevant part:

(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:

(1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);

(2) The date(s) of the violation or occurrence;

(3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;

(4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;

(5) Whether alternative water supplies should be used;

(6) What actions consumers should take, including when they should seek medical help, if known;

(7) What the water system is doing to correct the violation or occurrence;

(8) When the water system expects to return to compliance or resolve the occurrence;

(9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;

(10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail; and

(11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time." ...

(c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements:

(2) For a Tier 2 or Tier 3 public notice:

(A) The notice shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the public water system to obtain a translated copy of the notice or assistance in Spanish; and

(B) When a non-English speaking group other than Spanish-speaking exceeds 1,000 residents or 10 percent of the residents served by the public water system, the notice shall include:

1. Information in the appropriate language(s) regarding the importance of the notice; or

2. A telephone number or address where such residents may contact the public water system to obtain a translated copy of the notice or assistance in the appropriate language; and

(3) For a public water system subject to the Dymally-Alatorre Bilingual Services Act, Chapter 17.5, Division 7, of the Government Code (commencing with section 7290), meeting the requirements of this Article may not ensure compliance with the Dymally-Alatorre Bilingual Services Act.

(d) Each public notice given pursuant to this article shall:

- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
- (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
- (3) Not contain language that minimizes or contradicts the information being given in the public notice.

Appendix 64465-A. Health Effects Language - Microbiological Contaminants.

Contaminant	Health Effects Language
Total Coliform	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform/ <i>E. coli</i>	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Turbidity	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Section 64469 (Reporting Requirements) of CCR states in relevant part:

- (d) Within 10 days of giving initial or repeat public notice pursuant to Article 18 of this Chapter, except for notice given under section 64463.7(d), each water system shall submit a certification to the State Board that it has done so, along with a representative copy of each type of public notice given.

Section 64481 (Content of the Consumer Confidence Report) of CCR states in relevant part:

...

- (g) For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation.

- (1) Monitoring and reporting of compliance data.

Bacteriological Distribution Monitoring Report

1510019 Shafter, City of

Distribution System Freq: 4/W

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	CI2	CI2 Avg	Viol. Type	GWR Satisfied?	Comments
12/29/2015	Station: 10,17,19,20,23	<1	<1			Routine	0.99-1.74				
12/28/2015	Station: 1,2,3,4	A	A			Repeat	1.28-2.03				
12/21/2015	Station: 1,2,3,4,7,7A,7B,10,10A,10B,15,15A,15B,16,16A,16B,17,17A,17B	<1	<1			Repeat	0.9-3.2				
12/21/2015	Station: 18,18A,18B,19,19A,19B,20,20A,20B,21,21A,21B,22,22A,22B,23,23A,23B	<1	<1			Repeat	0.8-1.9				
12/20/2015	Station: 1,2,3,4,5,7,8,10,15,16,17,18,19,20,21,22,23	<1	<1			Repeat	0.8-1.8				
12/18/2015	Station: 15A,16,20A,21A,21B,22,22B	<1	<1			Repeat					
12/18/2015	Station: 7,7A,7B,10,10A,10B,15,15B,16A,16B,17,17A,17B,18,18A,18B,19,19A,19B,20,20B,21,22A,23,23A,23B	1.0-19	<1			Repeat					
12/16/2015	Station: 7,10,15,16,17,18,19,20,21,22,23	P	A			Routine	0.7-1.1		MCL		
12/14/2015	Station: 1,2,3,4	A	A			Routine	0.7-1.1				
12/8/2015	Station: 1,2,3,4	A	A			Routine					
11/24/2015	Sta #A	A	A			Repeat					
11/24/2015	Sta #B	A	A			Repeat					
11/24/2015	Sta #16	A	A			Repeat					
11/23/2015	Station #16	P	A			Routine	1.0				
11/1/2015	28 samples	A	A			Routine	0.5-1.1				
10/1/2015	24 samples	A	A			Routine	0.5-1.2				
9/1/2015	31 samples	A	A			Routine	0.3-1.4				
8/1/2015	27 samples	A	A			Routine	0.4-1.3				
7/1/2015	28 samples	A	A			Routine	0.5-1.3				
6/1/2015	31 samples	A	A			Routine	0.3-1.4				
5/1/2015	28 samples	A	A			Routine	0.5-1.4				
4/1/2015	28 samples	A	A			Routine	0.4-2.0				
3/1/2015	27 samples	A	A			Routine	0.7-1.8				
2/9/2015	Sta. #4B	A	A			Repeat	1.1				
2/9/2015	Sta. #4	A	A			Repeat	1.4				
2/9/2015	Sta. #4A	A	A			Repeat	1.0				
2/5/2015	Sta. #4	P	A			Routine	0.8				
2/1/2015	26 samples	A	A			Routine	0.7-1.6				
1/1/2015	20 samples	A	A			Routine	0.7-1.2				

Violation Key

MCL	Exceeds the maximum contaminant level	MR5	Incorrect number of repeat samples as follow-up to a positive sample
MR1	No monthly sample for the report month	MR6	No source sample
MR2	No quarterly sample for the report month	MR7	No summary report submitted
MR3	Incorrect number of routine samples for the report month	MR8	Other comments and/or info
MR4	Did not collect 5 routine samples for previous month's positive sample	MR9	CI2 not reported

Source Bacteriological Monitoring Report

1510019 Shafter, City of

Sample Date	Time	Source	Sample Type	Test Method	T Coli	E Coli	F Coli	HPC	Violation	Comments
12/28/2015		PV1,PV2,PV3,Tank 2	Treatment	MPN	<1.0	<1.0				
12/28/2015	10:10	Well 7	GWR Well	P/A	A	A				Cl2=0.1
12/28/2015	10:35	Well 14	GWR Well	MPN	<1.0	<1.0				
12/28/2015	11:55	Well 11	GWR Well	P/A	A	A				
12/18/2015	10:45	Well 14	GWR Well	MPN	<1	<1				
12/18/2015	10:48	Well 17	GWR Well	MPN	9.9	<1				
12/18/2015	11:00	Well 12	GWR Well	MPN	4.2	<1				
12/18/2015	11:15	Well 7	GWR Well	MPN	<1	<1				
12/1/2015	13:10	Well 7	Well	P/A	A	A				
11/24/2015		Wells 11,12,17	Well	P/A	A	A				
11/24/2015		PV1,PV2,PV3,Tank 2	Treatment					1.0 - 2.0		
11/24/2015	11:20	Well 7	Well	P/A	P	A				
11/24/2015	11:30	Well 14 Raw	Well					13		
10/28/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1-5		
10/28/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
10/28/2015	11:05	Well 14	Well	HPC				29		
9/30/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1-1.0		
9/30/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
9/30/2015	11:20	Well 14	Well	HPC				2.0		
8/27/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				2-220		
8/27/2015	10:55	Well 14	Well	HPC				17		
8/1/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
7/29/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				3-12		
7/29/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
7/29/2015	11:45	Well 14	Well	HPC				41		
6/30/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1-2		
6/30/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
6/30/2015	10:50	Well 14	Well	HPC				4.0		
5/28/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
5/28/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1-12		
5/28/2015	9:20	Well 14	Well	HPC				9.0		
4/30/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1-11		
4/30/2015	13:15	Well 14	Well	HPC				22		
4/1/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
3/26/2015		PV1,PV2,PV3,Tank 2	Treatment	HPC				<1 to 28		
3/26/2015		Wells: 7,8,11,12,14,17,	Well	P/A	A	A				
2/25/2015		Wells: 7,8,11,12,17	Well	P/A	A	A				
2/9/2015		Wells: 12, 17	GWR Well	P/A	A	A				
1/28/2015		Wells: 7,8,11,12,14,17	Well	P/A	A	A				
1/28/2015		Tank 2	Treatment	P/A	A	A		<1		



12-18-2015

BOIL WATER NOTICE

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

BOIL YOUR WATER BEFORE USING

Failure to follow this advisory could result in stomach or intestinal illness.

Due to recent detections of bacteria in your water supply, the State Water Resources Control Board, Division of Drinking Water, in conjunction with the County of Kern Public Health Services Department, Environmental Health Division and the City of Shafter are advising water customers of the City to use only boiled tap water or bottled water for drinking and cooking purposes as a safety precaution.

DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. Bring all water to a boil, **let it boil for one (1) minute**, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking and food preparation **until further notice**. This is the preferred method to assure that the water is safe to drink.

If this situation persists, below you will find alternative methods to disinfect your water.

- An alternative method of disinfection for residents that are not able to boil their water is to use fresh, unscented, liquid household bleach. To do so, add 8 drops (or 1/8 teaspoon) of bleach per gallon of clear water or 16 drops (or 1/4 teaspoon) per gallon of cloudy water, mix thoroughly, and allow it to stand for 30 minutes before using. A chlorine-like taste and odor will result from this disinfection procedure and is an indication that adequate disinfection has taken place.
- Water disinfection tablets may also be used by following the manufacturer's instructions.

We will inform you when tests show that water is safe to drink and you no longer need to boil your water. We anticipate resolving the problem within one week.

For more information contact:

Name	Agency	Address	Day Phone	Email
Michael James	City of Shafter	336 Pacific Ave Shafter, CA 93263	(661)746-5000	mjames@shafter.com
Donna Fenton	Kern County Environmental Health		(661)862-8726	donnaef@co.kern.ca.us
Tricia A. Wathen	District Engineer		(559)447-3300	tricia.wathen@waterboards.ca.gov

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PROOF OF NOTIFICATION
(Return with copy of the Notice)

As required by Section 116450 of the California Health and Safety Code, I notified all users of water supplied by the City of Shafter of the failure to comply with the Total Coliform Rule for the:

Circle one: 1st 2nd 3rd 4th quarter of 2015.

Notification was made on December 19, 2015.

To summarize report delivery used and good-faith efforts used, please check all items below that apply and fill-in where appropriate:


- ☐ The notice was distributed by direct delivery to each customer served by the water system.
- ☐ The notice was distributed by mail delivery to each customer served by the water system.

One or more of the following methods were used to reach persons not likely to be reached by a mailing or direct delivery (renters, nursing home patients, prison inmates, etc.): _____

- ☒ Posted the notice at the following conspicuous locations served by the water system (if needed, please attach a list of locations).
- Public drinking fountains
 - Self-serve water kiosks.
 - Digital Message Boards on State Route 43.
- ☐ Publication of the notice in a local newspaper or newsletter of general circulation (attach a copy of the published notice, including name of newspaper and date published).
- ☒ Posted the notice on the Internet at:
- www.shafter.com
 - <https://www.facebook.com/CityOfShafter>
- ☒ Other method used to notify customers.
- Churches for Sunday services on 12-20-15.
 - Local news.
 - Bakersfield Californian newspaper.
 - Other media outlets as noted on the attached report supplement.

DISCLOSURE: Be advised that Section 116725 and 116730 of the California Health and Safety Code state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in the county jail not to exceed one year, or by both the fine and imprisonment.

Certified by:



Signature

Michael James

Name

Public Works Director

Title

02-23-2016

Date

Due to the Division of Drinking Water within 10 days of notification to the public
Enforcement Action No.: _____

News Reports Water Boil Notice

12/19/2015

<http://bakersfieldnow.com/news/local/city-of-shafter-issues-boil-water-notice>
<http://www.bakersfield.com/news/2015/12/19/shafter-residents-warned-to-boil-water-after-bacteria-detected.html>
<http://www.kerngoldenempire.com/news/total-coliform-found-in-shafter-water-residents-must-boil-water>
<http://www.turnto23.com/news/local-news/city-of-shafter-boiling-water-tested-positive-for-coliform-bacteria>

12/20/2015

<http://www.turnto23.com/news/local-news/carrington-of-shafter-to-offer-fresh-water-to-shafter-residents>

12/21/2015

<http://bakersfieldnow.com/news/health/bacteria-found-in-shafter-water-isnt-dangerous>
<http://www.kerngoldenempire.com/news/state-water-board-officials-working-to-lift-tap-water-ban-for-the-holidays>
<http://www.kerngoldenempire.com/news/shafter-residents-told-to-boil-water-after-bacteria-found-in-citys-supply>
<http://www.kerngoldenempire.com/news/state-water-board-officials-working-to-lift-tap-water-ban-for-the-holidays>

12/22/2015

<http://bakersfieldnow.com/news/health/shafter-lifts-water-boil-order>
<http://www.bakersfield.com/News/2015/12/22/Boil-order-lifted-in-Shafter-following-clean-water-tests.html>
<http://www.kerngoldenempire.com/news/shafter-no-longer-under-boil-water-advisory>
<http://www.kerngoldenempire.com/news/people-in-shafter-are-waking-up-for-the-third-straight-day-without-clean-water>
<http://www.kerngoldenempire.com/news/shafters-water-boil-notice-lifted-late-tuesday-afternoon>
<http://www.turnto23.com/news/local-news/city-of-shafter-cancels-water-boil-notice>
<http://www.turnto23.com/news/local-news/will-shafter-have-enough-water-for-its-residents>

News Outlets Outside of Kern County

<http://www.abc10.com/story/news/local/california/2015/12/22/shafter-residents-ordered-boil-drinking-water/77745114/>
<http://www.sacbee.com/news/state/california/article51052595.html>
<http://www.washingtontimes.com/news/2015/dec/22/shafter-residents-ordered-to-boil-drinking-water/>
http://www.recorderonline.com/news/state-news/shafter-residents-ordered-to-boil-drinking-water/article_1be2d44e-f888-552a-96d1-a5c0f9c93865.html
<http://www.ocala.com/article/20151222/APN/312229802>
<http://www.cbs8.com/story/30808515/shafter-residents-ordered-to-boil-drinking-water>
<http://www.redbluffdailynews.com/general-news/20151222/shafter-residents-ordered-to-boil-drinking-water>
<http://www.sfgate.com/news/article/Shafter-residents-ordered-to-boil-drinking-water-6715023.php>

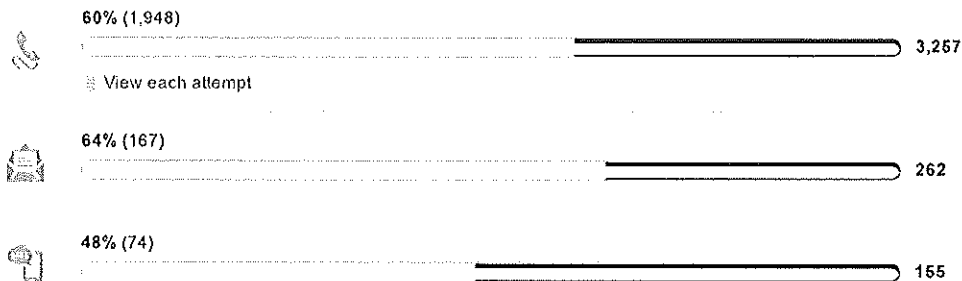
[Send](#)[Inbox](#)[Drafts](#)[Outbox](#)[Sent](#)[Templates](#)[Scripts](#)

Delivery Results

[Back to Sent](#) | [Print](#)

Title	Boil Water Notice Lifted
Message Type	Outreach
Site	CITY OF SHAFTER
Scheduled By	Britney Neal-Soberanis
Send Time	23 December 2015 7:00PM (PT)
Voice Completed	23 December 2015 7:33PM (PT) (First attempt completed at 23 December 2015 7:08PM (PT))
Text Completed	23 December 2015 7:03PM (PT)
Email Completed	23 December 2015 7:01PM (PT)
Selected Contacts	3,628 Successfully reached 2,242 (61%)
Mode Prioritization	No
Languages	English*

DEVICE DELIVERIES

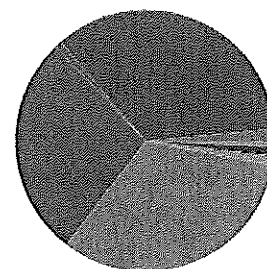
[Hide Detailed Results](#)

DETAILED DELIVERY RESULTS

Select all

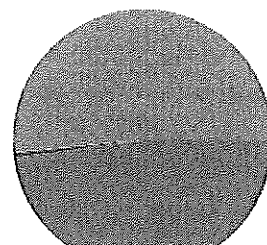
☐ Voice

<input type="checkbox"/> Hangup	22
<input type="checkbox"/> Fax/Modem	31
<input type="checkbox"/> Bad Phone Number	7
<input type="checkbox"/> Portal Subscription Not Set	35
<input type="checkbox"/> Live Delivery	1,058
<input type="checkbox"/> Answering Machine	890
<input type="checkbox"/> Busy	28
<input type="checkbox"/> No Answer	1,137
<input type="checkbox"/> Phone Network Busy	49



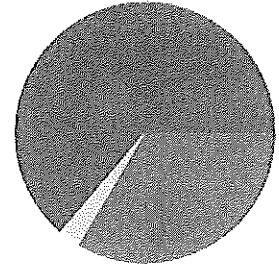
☐ Text

<input type="checkbox"/> Text Sent See More	74
<input type="checkbox"/> Text Not Sent	1
<input type="checkbox"/> Portal Subscription Not Set	80





<input type="checkbox"/>	Portal Subscription Not Set	88
<input type="checkbox"/>	Invalid Email Address	7
<input type="checkbox"/>	Email Delivered	167

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* *Email Delivery Statuses will change over time as we receive updates from recipients' servers.*



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City of Shafter

Published by David Franz · December 21, 2015 ·

UPDATE: AS OF 4:17 THE SHS WATER DISTRIBUTION IS CLOSED. WE HAVE ENOUGH WATER FOR THE PEOPLE CURRENTLY IN LINE. IF YOU ARE NOT IN LINE, PLEASE WAIT UNTIL TOMORROW.

8,824 people reached

Boost Post

56 Likes · 19 Comments · 82 Shares

Like

Comment

Share

8,824 People Reached**269** Likes, Comments & Shares**122**
Likes**56**
On Post**66**
On Shares**54**
Comments**38**
On Post**16**
On Shares**93**
Shares**82**
On Post**11**
On Shares**1,883** Post Clicks**2**
Photo Views**5**
Link Clicks**1,876**
Other Clicks

NEGATIVE FEEDBACK

3 Hide Post**0** Hide All Posts**0** Report as Spam**0** Unlike Page

POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by the Division of Drinking Water (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

Reik 12/29/15

ADMINISTRATIVE INFORMATION

PWS Name:	CITY OF SHAFTER	PWSID NUMBER:	1510019
Name	Address	Telephone #	
Operator in Responsible Charge (ORC)	Michael James	336 Pacific Avenue, Shafter, CA 93263	661-746-5002
Person that collected TC samples if different than ORC	Mark Brown	336 Pacific Avenue, Shafter, CA 93263	661-746-5002
Owner	City of Shafter	336 Pacific Avenue, Shafter, CA 93263	661-746-5002
Certified Laboratory for Microbiological Analyses	BC Laboratories	4100 Atlas Court, Bakersfield, CA 93308	661-327-4911
Date Investigation Completed:	January 22, 2016		
Month(s) of Total Coliform MCL Failure:	December, 2015		

INVESTIGATION DETAILS

SOURCE	WELL 7	WELL 8	WELL 11	WELL 12	WELL 14	WELL 17	COMMENTS
1. Inspect each well head for physical defects and report							
a. Is raw water sample tap upstream from point of disinfection?	Yes	Yes	Yes	Yes	Yes	Yes	
b. Is wellhead vent pipe screened?	Yes	Yes	Yes	Yes	Yes	Yes	
c. Is wellhead seal watertight?	Yes	Yes	Yes	Yes	Yes	Yes	
d. Is well head located in pit or is any piping from the wellhead submerged?	No	No	No	No	No	No	
e. Does the ground surface slope towards well head?	No	No	No	No	No	No	
f. Is there evidence of standing water near the wellhead?	No	No	No	No	No	No	
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)	No	No	No	No	No	No	
h. Is the wellhead secured to prevent unauthorized access?	Yes	Yes	Yes	Yes	Yes	Yes	
i. To what treatment plant (name) does this well pump?	N/A	N/A	N/A	N/A	Granulated Carbon Vessels	N/A	
j. How often do you take a raw water total coliform (TC) test?	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	
k. Provide the date and result of the last TC test at this location	12/18/15 Absent	N/A	12/21/15 Absent	12/18/15 Present	Dec. 2015 Absent	12/29/15 Absent	Well 8 has been inactive as directed by State

POSITIVE TOTAL COLIFORM INVESTIGATION

Page 2 of 6

TREATMENT	WELL 7	WELL 8	WELL 11	WELL 12	WELL 14	WELL 17	COMMENTS
1. If you provide continuous chlorination treatment, was there any equipment failure? Did the distribution system maintain a chlorine residual? a. Was emergency chlorination initiated?	No/Yes	N/A	No/Yes	No/Yes	No/Yes	No/Yes	
b. If yes, for how long?	Increased to 1.0-2.0	N/A	Increased to 1.0-2.0	Increased to 1.0-2.0	Increased to 1.0-2.0	Increased to 1.0-2.0	Since positive TC test, chlorine was increased as directed by State
2. Did the distribution system lose chlorine residual?	Ongoing No	N/A	Ongoing No	Ongoing No	Ongoing No	Ongoing No	
3. If you do not provide routine chlorination, was emergency chlorination initiated? If Yes,, when?	N/A	N/A	N/A	N/A	N/A	N/A	
4. Inspect each point where disinfectant is added and report							
a. For hypochlorinator systems							
1. Is the disinfectant feed pump feeding disinfectant?	Yes	Yes	Yes	Yes	Yes	Yes	
2. What is the feed rate of disinfectant in ml/minute	39	39	22	39	39	27	
3. What is the concentration of the disinfectant solution being fed? (percent, or mg/l of chlorine as HOCl)	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	
4. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)	MFR	MFR	MFR	MFR	MFR	MFR	
5. What is the age (days) of the disinfectant solution currently being used at this treatment location?	30	30	30	30	7	30	
6. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?	600	1,000	1000	2,500	2100	500	
7. What is the total chlorine residual measured immediately downstream from the point of application?	1.4	N/A	1.0	N/A	1.4	1.4	
8. What is the free chlorine residual measured immediately downstream from the point of application?	1.4	N/A	1.0	N/A	1.4	1.4	
9. What is the contact time in minutes from the point of disinfectant application to the first customer?	2.7	0.8	2.0	0.6	1.8	0.4	

POSITIVE TOTAL COLIFORM INVESTIGATION

Page 3 of 6

STORAGE	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5	COMMENTS
1. Is each tank locked to prevent unauthorized access?	Yes	Yes	Yes	Yes	Yes	
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?	Yes	Yes	Yes	Yes	Yes	
3. Is the overflow on each tank screened?	Yes	Yes	Yes	Yes	Yes	
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?	No	No	No	No	No	
5. Is the roof/cover of the tank sealed and free of any leaks.	Yes	Yes	Yes	Yes	Yes	
6. Is the tank above ground or buried.	Above	Above	Above	Above	Above	
7. a. If buried or partially buried, are there provisions to direct surface water away from the site.	N/A	N/A	N/A	N/A	N/A	
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?	Yes	Yes	Yes	Yes	Yes	No root intrusion found
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?	Separate	Separate	Separate	Separate	Separate	
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today?	1.7/1.7	1.4/1.4	1.2/1.2	1.2/1.2	N/A	Tank 5 currently off-online
10. What is the volume of the storage tank in gallons?	0.75 MG	2.3 MG	0.8 MG	0.8 MG	0.8 MG	
11. Is the tank baffled?	No	No	No	No	No	
12. Prior to the TC+ or EC+, what was the previous date item #1-7 were checked and documented?	Daily	Daily	Daily	Daily	Daily	

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DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	40 psi
2. Did pressure in the distribution system drop to less than 5 psi prior to experiencing the TCR positive finding.	No
3. Has the distribution system been worked on within the last week? (service taps, hydrant flushing, main breaks, main extensions, etc.) If yes, provide details.	No
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	No
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?	Yes
6. If there was a mainline leak, when was it repaired?	N/A
7. On what date was the distribution system last flushed?	December, 2015 – Lerdo Supply Line Between Core City and Tank 3
8. Is there a written flushing procedure you can provide for our review?	No
9. Do you have an active cross connection control program?	Yes
10. What is name and phone number of your Cross-Connection Control Program Coordinator?	David Wasserman (661) 862-8699
11. Is the review and testing of backflow prevention devices current?	Yes
12. On what date was the last physical survey of the system done to identify cross-connections?	December, 2015

BOOSTER STATION	SYSTEM RESPONSES
1. Do you have a booster pump? How many?	Yes. One booster station at each storage tank site.
2. Do you have a standby booster pump if the main pump fails?	Yes
3. Prior to bacteriological quality problems, did your booster pump fail?	No
4. Do you notice standing water, leakage at the booster station?	No

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SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)		Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample STA's 7, 10, 15-23
1. What is the height of the sample tap above grade? (inches)		36	36	36	36
2. Is the sample tap located in an exterior location or is it protected by an enclosure?		Both	Both	Both	Both
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?		Threaded	Threaded	Threaded	Threaded
4. Is the sample tap in good condition, free of leaks around the stem or packing?		Yes	Yes	Yes	Yes
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?		Yes	Yes	Yes	Yes
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings, other contaminants or spray irrigation systems)		Yes	Yes	Yes	Yes
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection		Yes	Yes	Yes	Yes
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)		Flamed, flushed and disinfected	Flamed, flushed and disinfected	Flamed, flushed and disinfected	Flamed, flushed and disinfected
9. Is this sample tap designated on the sampling plan submitted with this information request?		Yes	Yes	Yes	Yes
10. What were the weather conditions at the time of the positive sample (rainy, windy, sunny)?		Overcast & light rain	Overcast & light rain	Overcast & light rain	Overcast & light rain

GENERAL OPERATIONS:		Response
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?		None reported
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.		No problems reported
3. Does the system have backup power or elevated storage?		Yes
4. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?		No credible reports
5. What were the symptoms of illness if you received complaints about customers being sick?		N/A

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ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. Sketch of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the well, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Department
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.

SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?

Since the initial and repeat detections, subsequent citywide testing at routine distribution, well and tank sampling sites have all been negative for total coliforms. Two wells, #12 and #17, tested positive for total coliform immediately prior to the boil water notice, but eventually each was flushed and retested prior to the City requesting reactivation from the State. Much of the City's testing after the initial detections was split-sampled using up to three different labs and samplers. Before it authorized the lifting of the boil water that resulted from the detections, sanitary engineers from the California Department of Water Resources toured the City's well, tank and distribution sampling sites to ensure that there were no operating deficiencies. Finally, the City reviewed past records of construction projects, leaks and other out of the ordinary events and did not track anything that feasibly could have contributed to the City's positive detections. It should also be noted that the City had sufficient chlorine residuals at all times before, during and after the boil water notice period.

Based on the information we have now and investigations we've completed to date, it is believed the cause of the positive total coliform detections during December, 2015 was outdated sample bottles, sampler error or laboratory error or combination of either. Another possibility is insufficient chlorine contact time for water being pumped from Well #12 and/or Well #17, prior to the positive detections. However, it's important to emphasize that routine weekly sampling collection points in the Core City service area in which these two wells operate never showed positive detections. The influence these wells have on our most remote service area sampling collection points which tested positive, such as East Shafter and Southeast Shafter, is viewed to be very minimal which further casts doubt on the wells or insufficient disinfection being the cause.

Whether the City had legitimate or false detections, the lessons learned from the boil water notice that resulted have prompted staff to update its bacteriological siting plan and testing schedule which will include increasing all quarterly testing sites to monthly, staggering the monthly testing amongst our service areas to alternating weeks of each month, adding and deleting sampling sites to reflect the current water service boundaries and adding emergency contact information for regulatory health officials and laboratories. The completion of this updated plan is expected by the end of January, 2016.

CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

Michael James

Name

January 28, 2016

Date

Public Works Director

Title

Signature